REMARKS

In the Office Action mailed 7/15/2003, Claims 9 – 12, 14 – 17, 19 – 20 and 22 - 32 were rejected as being obvious over the prior art under 35 U.S.C. §103(a).

Claim 21 was objected to, but was indicated to contain allowable subject matter.

The Examiner further kindly offered advice on amendment of Claims 12 and 17 in order to place these claims in better form; Applicant has taken the Examiner's advice and has herein amended these claims.

Eckardt, WO 97/16777

The Examiner has relied upon *Eckardt* in his rejection under 35 U.S.C. §103(a). *Ekardt* discloses a "Method of Controlling the Pressure in a Compression Chamber." As delineated in the abstract, the following constitutes the steps of the *Ekardt* method:

1. "The actual angle (Iw) of rotation of the turning valve (14) and the actual pressure (Ip) in the compression chamber (10) are recorded;
2. An ideal pressure (Sp) and an ideal angle (Sw) of rotation associated with this ideal pressure (Sp) are *predetermined* and
3. pressure deviation (Dp) between the actual pressure (Ip) and the ideal pressure (Sp) and also a deviation (Dp) of the angle of rotation between the actual angle (Iw) of rotation and the ideal angle (Sw) are *fixed.*
4. Setting means (40) adjusts the angle of rotation on the turning valve (14) firstly in relation to the deviation (Dw) of the angle of rotation and

5. subsequently in relation to the pressure deviation (Dp)." [*emphasis and outline form added for clarity*]

Applicant notes that in "step" 3, above, the second (Dp) is erroneous, and was meant to be the (Dw) referred to in "step 4."

The method taught by ***Eckardt*** is patentably distinct from Applicant's novel and nonobvious method. In ***Eckardt***, the method actually commences with the fixing of at least three parameters: an ideal pressure (Sp) and ideal angle of rotation (Sw) associated with that ideal pressure (Sp); pressure deviation (Dp) between the actual pressure (Ip) and the ideal pressure (Sp); and angle of rotation deviation (Dw) between the actual angle of rotation (Iw) and the ideal angle of rotation (Sw).

Once these parameters are fixed, the method of "adjust[ing] the angle of rotation on the turning valve (14) *firstly* in relation to the deviation of the angle of rotation (Dw) and *subsequently* in relation to the pressure deviation (Dp)."

Recall that (Dp) is equal to the difference between actual and ideal pressure (Ip and Sp, respectively), and that (Dw) is equal to the difference between the actual and ideal angle of rotation (Iw and Sw, respectively). Finally, recall that Sp and Sw are predetermined and recorded (presumably for a number of predetermined desired pressures); this means that the actual pressure is not acted upon when *firstly* the angle of rotation on the turning valve is acted upon. In fact, it is the predetermined "ideal angle of rotation" that is acted upon – specifically, it is the difference between the actual angle of rotation of the valve and the

ideal angle of rotation of the valve. It is only after acting on the rotation deviation (Dw) that the pressure deviation (Dp) is "acted upon."

This approach is easily explained in view of the distinct application for the *Eckardt* method, namely in a pneumatic braking device for a strip of recording medium. The apparent goal is to set the pressure to some ideal, predetermined pressure which must be extremely reproducible for a predetermined valve rotational position.

Applicant's respective position is that the *Eckardt* method not only is nonobvious, but is unworkable as applied to the problems solved by Applicant's method. This is apparent from the distinction in the recitation of Claim 9 as compared to the *Eckardt* method.

In Applicant's claimed process, a "step command signal" is generated responsive to a "pressure sensor signal" and a "tool logic signal." It is only after generation of the "step command signal" that the "position control steps" are executed. Since the "position control steps" are responsive to the "step command signal," clearly the "position control steps" are responsive to the pressure sensor signal and the tool logic signal. This means that the position control steps are responsive to actual pressure in the chamber.

As discussed above, in the *Eckardt* method, it is the position deviation that is acted upon first. Furthermore, a predetermined *ideal pressure* is a factor in the valve adjustment after the position deviation has been acted upon – this is not the same as acting responsive to the actual chamber pressure and the tool logic signal. If the valve or chamber characteristics change, then the *ideal* pressure and position numbers no longer would be useful for controlling the pressure in the chamber with any accuracy.

Clearly, then, the method taught by *Eckardt* is different from Applicant's Claim 9 and similarly in Claim 19. In fact, *Eckardt* teaches away from Applicant's claimed invention. Furthermore, and as documented in the previously filed inventor's declarations, there not only is no suggestion to combine the prior art to arrive at Applicant's claimed invention, but there has been a long felt and previously unmet need until Applicant's invention and the current competition to Applicant also teach away from Applicant's claimed invention. As such, these claims and the claims depending therefrom are novel and nonobvious and therefore must be allowed.

Regarding Independent Claims 14 and 26, these claims relate to a method for controlling fluid flow through a conduit. In addition to the reasons set forth above, these claims are further distinct because nothing in the cited art teaches the control of fluid flow using Applicant's claimed invention. Consequently, these claims and the claims dependent therefrom must also be allowed.

Conclusi n

In view of the foregoing amendments and remarks, Applicant respectfully requests that the application be reconsidered, the claims be allowed, and the case passed to issue.

Respectfully submitted,

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